Hurricane Katrina

One year ago New Orleans was devastated when Hurricane Katrina hit the US Gulf coast on 29 August 2005. Although strong, with sustained winds of 125 m.p.h. at landfall, Katrina was not the strongest hurricane in history. However, it was certainly one of the devastating economically - costing the US more than $100 billion - and tragically claiming many thousands of lives.

The 2005 tropical storm season in the North Atlantic was record-breaking. There were 27 named tropical storms of which 14 became hurricanes, including four major category 5 hurricanes. There were so many storms that for the first time forecasters at the National Hurricane Center in Miami had to use names from the Greek alphabet.

In the USA, major hurricanes cause more than 83% of the damage from natural events; although they only account for 21% of tropical cyclones which actually make landfall. Most Atlantic hurricane seasons will see a tropical cyclone reaching Category 5 (maximum sustained winds of more than 156 m.p.h.) - however, few affect land areas, especially in the USA. Katrina was one which did and the ensuing devastation has been well documented.

The Met Office routinely provides input into the tropical cyclone warning process by sending its forecasts of storm tracks (the direction the cyclones are predicted to take) to the National Hurricane Center, every 12 hours.

More about our tropical cyclone service

In the case of Katrina, Met Office forecasts predicted the location of landfall to an accuracy of 60km three days ahead. Less than a month later, when Hurricane Rita threatened further devastation, the Foreign and Commonwealth Office; the Deputy Consul-General and the British Embassy in Washington were among the departments and organisations which followed our forecasts.

The Met Office now works routinely with the FCO to provide hurricane warnings for British travellers.

Following Hurricane Rita, Vice Consul for Science and Technology at the FCO, May Akrawi said: "I was running the American model and receiving the Met Office updates, and the Met Office model was by far the most accurate, as far as the predicted eastward shift of Rita. We are very grateful to our colleagues at the Met Office for work on these models and their continuous and timely feedback."

©Crown copyright www.metoffice.gov.uk